

Appl. No. 10/817,449  
Amendment  
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### Amendments to the Claims:

1. (Original) A method for treating bladder or urinary tract cancer in a human or veterinary patient, said method comprising the step of administering to the patient a therapeutically effective amount of a compound selected from the group consisting of:

4'-hydroxy-4,2',6'-trimethoxychalcone;

2'-hydroxy-4,4',6'-trimethoxychalcone (Flavokawain A);

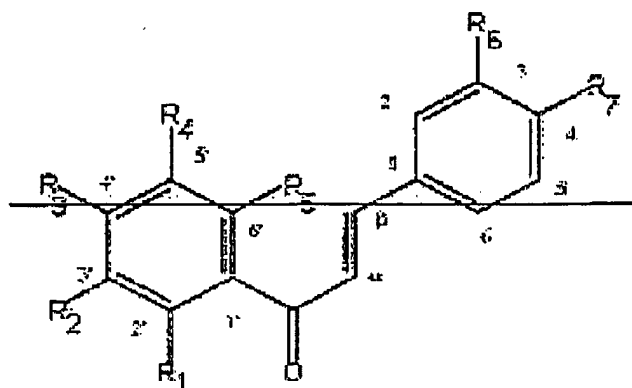
2'-4-dihydroxy-4',6'-dimethoxychalcone (Flavokawain C);

2',4,6'-trihydroxy-4-methoxy-3'-prenylchalcone (Xanthogalenol);

2',6',4-trimethoxy-4'-hydroxy-3'-prenylchalcone; and

pharmaceutically acceptable salts thereof.

having the formula:



Formula 1

wherein;

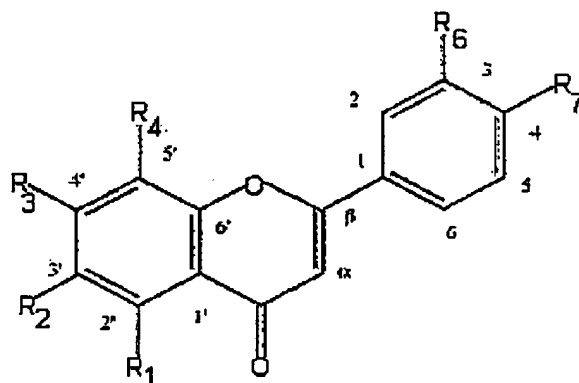
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~~R<sub>4</sub>, R<sub>3</sub>, R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub> are selected from H, OH, O-Alkyl, O-Alkenyl, O-Acyl, O-Glucosyl, O-Sulphate, -Glucuronate and O-Amino-Acid, halogen, amino, substituted amino and oxygen atom;~~

~~R<sub>2</sub> and R<sub>4</sub> are selected from H, alkyl and alkenyl, wherein the said alkyl and alkenyl groups have from 1 to 10 carbon atoms and up to 4 double bonds; and~~

~~the hydrogen on the  $\alpha$ -carbon of the olefinic double bond may or may not be substituted with a methyl, phenyl or substituted phenyl group.~~

2. (Withdrawn) A method according to Claim 1, where R<sub>5</sub> is an oxygen atom that is connect to the  $\beta$ -carbon atom of the olefinic double bond to form a compound having the formula:



Formula 2

wherein;

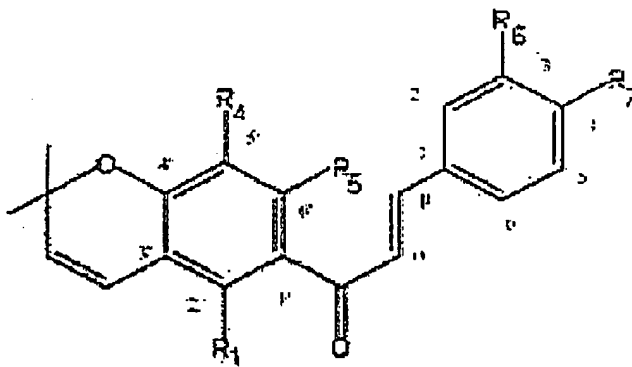
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R<sub>1</sub>, R<sub>3</sub>, R<sub>6</sub> and R<sub>7</sub> are selected from H, OH, O-Alkyl, O-Alkenyl, O-Acyl, O-Glucosyl, O-Sulphate,  $\gamma$ -Glucuronate and O-Amino Acid, halogen, amino, substituted amino and oxygen atom;

R<sub>2</sub> and R<sub>4</sub> are selected from H, alkyl and alkenyl, wherein the said alkyl and alkenyl groups have from 1 to 10 carbon atoms and up to 4 double bonds; and

the hydrogen on the  $\alpha$ -carbon of the olefinic double bond may or may not be substituted with a methyl, phenyl or substituted phenyl group.

3. (Withdrawn) A method according to Claim 1, where R<sub>2</sub> is prenyl or other alkenyl and R<sub>3</sub> is OH, wherein R<sub>2</sub> and R<sub>3</sub> are combined to form a cyclic ring structure and a compound having the formula :



Formula 3A

wherein;

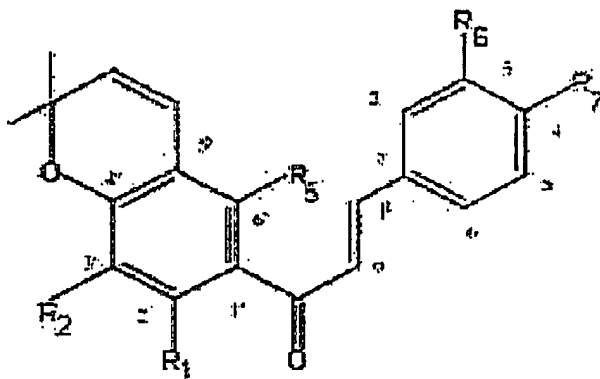
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R<sub>1</sub>, R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub> are selected from H, OH, O-Alkyl, O-Alkenyl, O-Acyl, O-Glucosyl, O-Sulphate, )-Glucuronate and O-Amino Acid, halogen, amino, substituted amino and oxygen atom;

R<sub>4</sub> is selected from H, alkyl and alkenyl, wherein the said alkyl and alkenyl groups have from 1 to 10 carbon atoms and up to 4 double bonds; and

the hydrogen on the  $\alpha$ -carbon of the olefinic double bond may or may not be substituted with a methyl, phenyl or substituted phenyl group.

4. (Withdrawn) A method according to Claim 1, wherein R<sub>4</sub> is prenyl or other alkyl, R<sub>3</sub> is OH and said R<sub>3</sub> and R<sub>4</sub> are combined to form a cyclic ring structure and a compound of the formula:



Formula 3B

wherein;

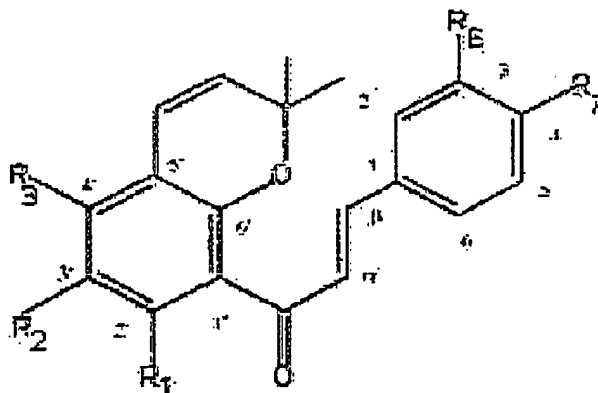
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$R_1$ ,  $R_5$ ,  $R_6$  and  $R_7$  are selected from H, OH, O-Alkyl, O-Alkenyl, O-Acyl; O-Glucosyl, O-Sulphate,  $\gamma$ -Glucuronate and O-Amino Acid, halogen, amino, substituted amino and oxygen atom;

$R_2$  is selected from H, alkyl and alkenyl, wherein the said alkyl and alkenyl groups have from 1 to 10 carbon atoms and up to 4 double bonds; and

the hydrogen on the  $\alpha$ -carbon of the olefinic double bond may or may not be substituted with a methyl, phenyl or substituted phenyl group.

5. (Withdrawn) A method according to Claim 1 wherein  $R_4$  is prenyl or other alkyl,  $R_5$  is OH and are combined to form a cyclic ring and a compound having the formula:



Formula 3C

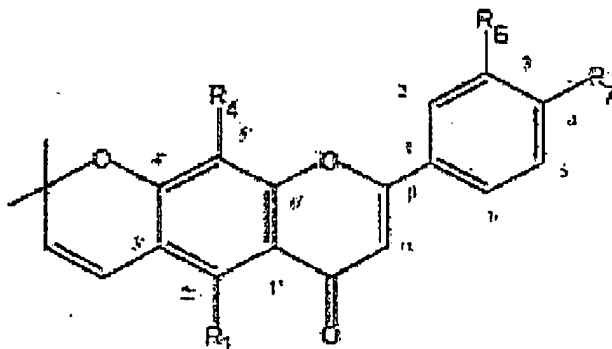
$R_1$ ,  $R_3$ ,  $R_6$  and  $R_7$  are selected from H, OH, O-Alkyl, O-Alkenyl, O-Acyl; O-Glucosyl, O-Sulphate,  $\gamma$ -Glucuronate and O-Amino Acid, halogen, amino, substituted amino and oxygen atom;

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$R_2$  is selected from H, alkyl and alkenyl, wherein the said alkyl and alkenyl groups have from 1 to 10 carbon atoms and up to 4 double bonds; and

the hydrogen on the  $\alpha$ -carbon of the olefinic double bond may or may not be substituted with a methyl, phenyl or substituted phenyl group.

6. (Withdrawn) A method according to Claim 1, where  $R_2$  is prenyl or other alkenyl,  $R_3$  is OH and  $R_2$  and  $R_3$  combine to form a cyclic ring and a compound of formula:



**Formula 4A**

wherein;

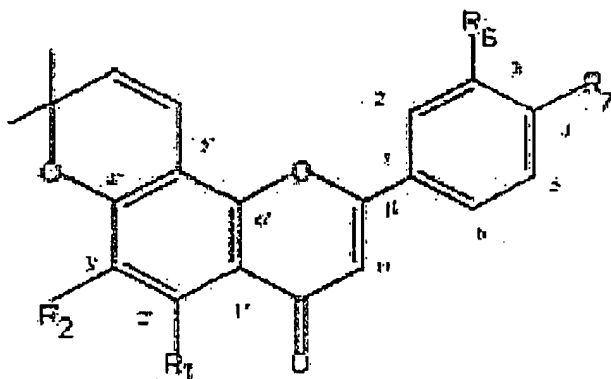
$R_1$ ,  $R_6$  and  $R_7$  are selected from H, OH, O-Alkyl, O-Alkenyl, O-Acyl; O-Glucosyl, O-Sulphate, )-Glucoronate and O-Amino Acid, halogen, amino, substituted amino and oxygen atom;

$R_4$  is selected from H, alkyl and alkenyl, wherein the said alkyl and alkenyl groups have from 1 to 10 carbon atoms and up to 4 double bonds; and

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the hydrogen on the  $\alpha$ -carbon of the olefinic double bond may or may not be substituted with a methyl, phenyl or substituted phenyl group.

7. (Withdrawn) A method According to Claim 1 wherein  $R_4$  is prenyl or other alkenyl,  $R_3$  is OH and wherein  $R_3$  and  $R_4$  are combined to form a cyclic ring structure and a compound having the formula:



Formula 4B

wherein;

$R_1$ ,  $R_6$  and  $R_7$  are selected from H, OH, O-Alkyl, O-Alkenyl, O-Acyl; O-Glucosyl, O-Sulphate, )-Glucoronate and O-Amino Acid, halogen, amino, substituted amino and oxygen atom;

$R_2$  is selected from H, alkyl and alkenyl, wherein the said alkyl and alkenyl groups have from 1 to 10 carbon atoms and up to 4 double bonds; and

the hydrogen on the  $\alpha$ -carbon of the olefinic double bond may or may not be substituted with a methyl, phenyl or substituted phenyl group.

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8-19. (Cancelled)

20. (Original) A method according to claim 1 wherein the compound is administered orally.

21. (Original) A method according to Claim 1, wherein the compound is administered intravesically.

22. (New) A method according to claim 1 wherein the compound is administered at a dose of from about 0.01 mg per kilogram of body weight per day to about 100 mg/kg of body weight per day, in a single daily dose or divided into more than one daily dose.

23. (New) A method according to claim 1 wherein the compound is administered at a dose of from about 0.05 mg per kilogram of body weight per day to about 50 mg/kg of body weight per day, in a single daily dose or divided into more than one daily dose.

24. (New) A method according to claim 1 wherein the compound is administered at a dose of from about 0.1 mg per kilogram of body weight per day to about 25 mg/kg of body weight per day, in a single daily dose or divided into more than one daily dose.

25. (New) A method according to claim 1 wherein the compound is administered parenterally.

26. (New) A method according to claim 1 wherein the compound is administered in combination with at least one other compound selected from the group consisting of: cisplatin, carboplatin, taxanes, paclitaxel, docetaxel, gemcitabine, ifosfamide, methotrexate, trimetrexate, piritrexim, thiotepa, doxorubicin and mitomycin.